

CLAIMS

We claim:

- 5 1. A method of treating a Pin-1 associated disorder in a subject comprising,
administering to a subject an effective amount of a MSPCIT such that said
Pin-1 associated disorder is treated.
- 10 2. The method of claim 1 wherein said MSPCIT covalently interacts with a
serine.
- 15 3. The method of claim 1 wherein said MSPCIT covalently interacts with a
cysteine.
- 20 4. The method of claim 2, wherein said MSPCIT forms a Michael adduct
with serine-114.
- 25 5. The method of claim 3, wherein said MSPCIT forms a Michael adduct
with cysteine-113.
- 30 6. The method of claim 3, wherein said MSPCIT forms a disulfide bond with
cysteine-113.
7. A compound that specifically modulates the activity of Pin-1 by covalently
interacting with cysteine-113 or serine-114 of the Pin-1 polypeptide.
8. The compound of claim 7 that further interacts with one of the regions of
the Pin-1 polypeptide selected from the group consisting of the
hydrophobic pocket, the substrate entry groove, the phosphate binding
pocket, or the lip region.
9. A compound that is capable of a specific covalent interaction with an
amino acid residue of the Pin1 active site.

10. The compound of claim 9 that further interacts with one of more of the following areas of the active site: the hydrophobic pocket, the cysteine/serine valley, the phosphate binding pocket, the substrate entry groove, and the lip region.